WHAT IS CLAIMED IS:

1. An optical head comprising:

a light emitter/detector for emitting a laser light towards a recording surface of an optical disc having information optically recorded thereon and detecting a return light component of the laser light reflected at the recording surface of the optical disc to detect at least a tracking error signal;

a diffraction grating provided between the light emitter/detector and the optical disc to split the laser light emitted from the light emitter/detector into at least three beams;

a light converging optical system provided between the diffraction grating and optical disc to converge the lights split by the diffraction grating to the recording surface of the optical disc;

the light emitter/detector comprising a first light source to emit a first light beam and a second light source to emit a second light beam having a shorter wavelength than the first light beam; and

the diffraction grating having formed therein a plurality of slits whose depth is selected so that the efficiency of diffraction of first-order light when the first light beam is incident upon the diffraction grating is higher than that when the second light beam is incident upon the diffraction grating.

2. The optical head as set forth in Claim 1, wherein the depth of the slits formed in the diffraction grating is selected so that the efficiency of diffraction of first-order light when the first light beam is incident upon the diffraction grating is higher than 5% while the efficiency

of diffraction of first-order light when the second light beam is incident upon the diffraction grating is lower than 5%.

3. The optical head as set forth in Claim 1, wherein:

the first light beam has a wavelength of approximately 785 ± 25 nm; and

the second light beam has a wavelength of approximately 655 ± 25 nm.

4. The optical head as set forth in Claim 1, wherein the first and second light sources and a photodetector detects a return light component of the laser light reflected at the optical disc are mounted on a semiconductor substrate.

5. The optical head as set forth in Claim 1 and further comprising:

a housing which receives the first and second light sources and a photodetector which detects at least a tracking error signal based on a return light component of the laser light reflected at the optical disc; and

an optical element placed on an opening of the housing;

wherein the diffraction grating is disposed on one surface of the optical element.

6. The optical head as set forth in Claim 5, wherein the optical element has a holographic element disposed on another surface thereof so that the return light component is guided to the photodetector.

7 An optical recording and/or reproducing apparatus comprising:

means for rotating an optical disc having information recorded thereon;

an optical head to emit a light towards a recording surface of the optical disc and

to detect a return light from the optical disc; and

a signal processing circuit to process a signal detected by the optical head;

the optical head comprising:

a light emitter/detector for emitting a laser light towards a recording surface of an optical disc having information optically recorded thereon and detecting a return light component of the laser light reflected at the recording surface of the optical disc to detect at least a tracking error signal;

a diffraction grating provided between the light emitter/detector and the optical disc to split the laser light emitted from the light emitter/detector into at least three beams;

a light converging optical system provided between the diffraction grating and optical disc to converge the lights split by the diffraction grating to the recording surface of the optical disc;

the light emitter/detector comprising a first light source to emit a first light beam and a second light source to emit a second light beam having a shorter wavelength than the first light beam; and

the diffraction grating having formed therein a plurality of slits whose depth is selected so that the efficiency of diffraction of first-order light when the first light beam is incident upon the diffraction grating is higher than that when the second light beam is incident upon the diffraction grating.

8 The optical recording and/or reproducing apparatus as set forth in Claim 7, wherein the depth of the slits formed in the diffraction grating is selected so that the efficiency

of diffraction of first-order light when the first light beam is incident upon the diffraction grating is higher than 5% while the efficiency of diffraction of first-order light when the second light beam is incident upon the diffraction grating is lower than 5%.

9. The optical recording and/or reproducing apparatus as set forth in Claim 7, wherein:

the first light beam has a wavelength of approximately 785 ± 25 nm; and

the second light beams has a wavelength of approximately 655 ± 25 nm.

10. The optical recording and/or reproducing apparatus as set forth in Claim 7, wherein the first and second light sources and a photodetector which detects a return light component of the laser light reflected at the optical disc are mounted on a semiconductor substrate.

11. The optical recording and/or reproducing apparatus as set forth in Claim 7 and further comprising:

a housing which receives the first and second light sources and a photodetector which detects at least a tracking error signal based on a return light component of the laser light reflected at the optical disc; and

an optical element is placed on an opening of the housing;

wherein the diffraction granting is disposed on one surface of the optical element.

12. The optical recording and/or apparatus as set forth in Claim 11, wherein the optical element has a holographic element disposed on another surface thereof so that the return

light component is guided to the photodetector.

13. An optical head comprising:

a first light source to emit a first light beam;

a second light source spaced a predetermined distance from said first light source to emit a second light beam having a shorter wavelength than the first light beam;

a diffraction grating provided between the first/second light sources and an optical disc to split the laser light emitted from the first light source or second light source into at least three beams; and

a light converging optical system provided between the diffraction grating and the optical disc to converge the light split by the diffraction grating to the recording surface of the optical disc;

wherein the diffraction grating has formed therein a plurality of slits whose depth is selected so that the efficiency of diffraction of first-order light when the first light beam is incident upon the diffraction grating is higher than the efficiency of diffraction of first-order light when the second light beam is incident upon the diffraction grating.

14. The optical head as set forth in Claim 13, wherein the depth of the slits formed in the diffraction grating is selected so that the efficiency of diffraction of first-order light when the first light beam is incident upon the diffraction grating is higher than 5% while the efficiency of diffraction of first-order light when the second light beam is incident upon the diffraction grating is lower than 5%.

15. The optical head as set forth in Claim 13, wherein,

the first light beam has a wavelength of 785 ± 25 nm; and

the second light beam has a wavelength of 655 ± 25 nm.

16. The optical head as set forth in Claim 13, wherein the first and second light sources and a photodetector which detects at least a tracking error signal based on a return light component of the laser light reflected at the optical disc are mounted on a semiconductor substrate.

17. The optical head as set forth in Claim 13 and further comprising,

a housing which receives the first and second light sources and a photodetector which detects at least a tracking error signal based on a return light component of the laser light reflected at the optical disc; and

an optical element is placed on an opening of the housing;

wherein the diffraction grating is disposed on one surface of the optical element.

18. The optical head as set forth in claim 17, wherein the optical element has a holographic element disposed on another surface thereof so that the return light component is guided to the photodetector.

19. An optical recording and/or reproducing apparatus comprising:

means for driving the rotation of an optical disc having information recorded therein;

an optical head to emit a light towards a recording surface of the optical disc driven to rotate by the rotation driving means and to detect a return light from the optical disc;

and

a signal processing circuit to process a signal detected by the optical head;

the optical head comprising:

a first source to emit a first light beam;

a second light source spaced a predetermined distance from said first light source to emit a second light beam having a shorter wavelength than the first light beam;

a diffraction grating provided between the first/second light sources and an optical disc to split the laser light emitted from the first light source or second light source into at least three beams; and

a light converging optical system provided between the diffraction grating and the optical disc to converge the light split by the diffraction grating to the recording surface of the optical disc; and

wherein the diffraction grating having formed therein a plurality of slits whose depth is selected so that the efficiency of diffraction of first-order light when the first light beam is incident upon the diffraction grating is higher than the efficiency of diffraction of first-order light when the second light beam is incident upon the diffraction grating.

20. The optical recording and/or reproducing apparatus as set forth in Claim 19, wherein the depth of the slits formed in the diffraction grating is selected so that the efficiency of diffraction of first-order light when the first light beam is incident upon the diffraction grating is higher than 5% while the efficiency of diffraction of first-order light when the second light beam is incident upon the diffraction grating is lower than 5%.

21. The optical recording and/or reproducing apparatus as set forth in Claim 19 wherein:

the first light beam has a wavelength of 785 ± 25 nm; and

the second light beam has a wavelength of 655 ± 25 nm.

22. The optical recording and/or reproducing apparatus as set forth in Claim 19, wherein the first and second light sources and a photodetector which detects at least a tracking error signal based on a return light component of the laser light reflected at the optical disc are mounted on a semiconductor substrate.

23. The optical recording and/or reproducing apparatus as set forth in Claim 19 and further comprising:

a housing which receives the first and second light sources and a photodetector which detects at least a tracking error signal based on a return light component of the laser light reflected at the optical disc; and

an optical element is placed on an opening of the housing;

wherein the diffraction grating is disposed on one surface of the optical element.

24. The optical recording and/or reproducing apparatus as set forth in Claim 23, wherein the optical element has a holographic element disposed on another surface so that the return light component is guided to the photodetector.

25. An integrated optical module for emitting a laser light and detecting a return light component of the laser light, comprising:

a first light source to emit a first light beam;

a second light source spaced a predetermined distance from said first light source to emit a second light beam having a shorter wavelength than the first light beam;

a photodetector which detects the return light beam component of the laser light emitted from the first or second light source;

a housing which receives the first light source, the second light source and the photodetector, said housing having an opening;

an optical element disposed on the opening; and

a diffraction grating provided on one surface of the optical element to split the laser light emitted from the first light source or second light source into at least three beams;

wherein the diffraction grating having formed therein a plurality of slits whose depth is selected so that the efficiency of diffraction of first-order light when the first light beam is incident upon the diffraction grating is higher than the efficiency of diffraction of first-order light when the second light beam is incident upon the diffraction grating.

26. The integrated optical module as set forth in Claim 25, wherein the depth of the slits formed in the diffraction grating is selected so that the efficiency of diffraction of first-order light when the first light beam is incident upon the diffraction grating is higher than 5% while the efficiency of diffraction of first-order light when the second light beam is incident upon the diffraction grating is lower than 5%.

27. The integrated optical module as set forth in Claim 25 wherein:

the first light beam has a wavelength of 785 ± 25 nm; and

the second light beam has a wavelength of 655 ± 25 nm.

28. The integrated optical module as set forth in Claim 25, wherein the first and second light sources and the photodetector are mounted on a semiconductor substrate.

29. The integrated optical module as set forth in Claim 25, wherein the optical element has a holographic element on another surface thereof so that the return light component is guided to the photodetector.